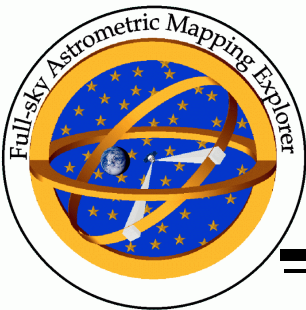


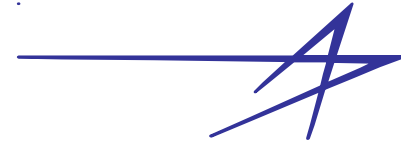
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# Instrument Optics

Lynn Huff



# Optical Requirements



<b>Optical Quality</b>	<b>&lt;1/20 wave rms</b>	<b>&lt;1/20 wave rms</b>	<b>was 1/40 wave rms</b>
<b>Effective Focal Length</b>	<b>15.00 +/- 0.1 meters</b>	<b>15.017 +/- 0.05 meters</b>	
<b>Field of View</b>	<b>1.14 degrees full angle</b>	<b>1.14 degrees full angle</b>	<b>was 1.10 degrees</b>
<b>Clear Aperture</b>	<b>55.9 - 56.3 cm x 13 cm</b>	<b>56.0 cm x 13.0 cm</b>	<b>was 60 cm</b>
<b>Basic Angle</b>	<b>81.5 - 85 degrees</b>	<b>84.3 degrees</b>	
<b>Basic Angle Stability:</b>	<b>&lt;1 uarc / minute</b>	<b>&lt;2 uarc / minute <b>TBD</b></b>	
<b>Field Curvature</b>	<b>&lt;1/20 wave rms</b>	<b>&lt;1/100 wave rms</b>	
<b>Spectrum</b>	<b>400 nm to 900 nm</b>	<b>400 nm to 900 nm <b>TBD</b></b>	<b>option for u' band</b>
<b>Distortion</b>	<b>&lt;15 microns</b>	<b>&lt;3 microns <b>TBD</b></b>	<b>with aspherized FPA Window</b>
<b>Lateral Color</b>	<b>TBD</b>	<b>&lt;3 microns <b>TBD</b></b>	<b>with aspherized FPA Window</b>
<b>Transmission</b>	<b>15th Magnitude star</b>	<b>15.5 Magnitude <b>TBD</b></b>	